

PMC-EF2a

(20402)

**U.S. DEPARTMENT OF ENERGY  
EERE PROJECT MANAGEMENT CENTER  
NEPA DETERMINATION**



RECIPIENT: Arkansas State University

STATE: AR

PROJECT TITLE : Ethanol from Agriculture for Arkansas and America

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
CDP		GFO-10-537	GO88025

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination:

**CX, EA, EIS APPENDIX AND NUMBER:**

Description:

**B3.6** Siting, construction (or modification), operation, and decommissioning of facilities for indoor bench-scale research projects and conventional laboratory operations (for example, preparation of chemical standards and sample analysis); small-scale research and development projects; and small-scale pilot projects (generally less than two years) conducted to verify a concept before demonstration actions. Construction (or modification) will be within or contiguous to an already developed area (where active utilities and currently used roads are readily accessible).

## Rational for determination:

Arkansas State University proposes to use federal funds to research cellulosic feedstock to identify inexpensive enzymes that will allow for the release of fermentable sugars. This research has the potential to reduce the cost of enzymes required and make cellulosic feedstock an economic alternative to grain based ethanol.

This project will involve expression of enzymes using alternative germplasm, improvements in molecular constructs for embryo targeted expression and endosperm targeted expression, cellulase activity enhancement, analysis of free sugar release from biomass, and project management & reporting.

This project will take place within existing laboratory facilities, the applicant has provided an R & D questionnaire which thoroughly addresses chemical and safety protocols.

This project comprises of conventional research and development within existing facilities, therefore an CX B3.6 will apply.

**NEPA PROVISION**

DOE has made a final NEPA determination for this award

Insert the following language in the award:

Note to Specialist :

Eugene Brown 7/22/2010

**SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.**

NEPA Compliance Officer Signature:

*Kimberly K...*  
NEPA Compliance Officer

Date:

7/22/2010

**FIELD OFFICE MANAGER DETERMINATION**